071504T4WLD

WELDING - LEVEL 4

ENG/OS/WEF/CR/04/4/A

Perform Gas Welding In All Positions With Various Metal Work Pieces

March/April 2025

TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)

OBSERVATION CHECKLIST

PRACTICAL ASSESSMENT

INSTRUCTIONS TO ASSESSOR

1. Assess the candidate as the practical progresses observing the critical areas
2. You are required to mark the practical as the candidate perform the tasks
3. You are required to take video clips at critical points
4. Ensure the candidate has a name tag and registration code at the back and front

OBSERVATION CHECKLIST

Candidate's Name & Registration Code			
Assessor's Name & Registration Code			
Venue of Assessment			
Date of Assessment			
Items to be Evaluated: *Please award marks as appropriate. Give a brief comment on your observation.*	**Marks Available**	**Marks Obtained**	**Comments**
1. Adhered to prescribed safety: a) Wore and used PPEs correctly i. Welding shield/googles ii. Safety boots iii. Leather gloves iv. Leather apron/Overall/Dust coat **(Award 1 mark for each)**	**4**		
Sub-total	**4**		
2. Set up gas welding equipment; a) Connected gas horses b) Pressure setting: i) Checked constant oxygen gas flow ii) Checked constant acetylene gas flow c) Lighting up: (Opened and lit up acetylene gas, followed by oxygen gas) d) Shutting off blowpipe: i) Closed acetylene valve first ii) Then closed oxygen valve e) Closing down: i) Closed down both cylinder valves	**12**		

ii) Opened oxygen blowpipe valve to drain oxygen out iii) Close oxygen blowpipe valve iv) Opened acetylene blowpipe valve to drain it out v) Close acetylene blowpipe valve f) Hanged up the welding blowpipe and hoses **(Award 1 mark for each)**			
Sub-total	**12**		
3. Performed welding positions as per the job specifications; i) 1G ii) 3F iii) 2F **(Award 1 mark for each)**	**3**		
Sub-Total	**3**		
4. Performed housekeeping: i. Left the work area in a safe, clean and tidy state ii. Segregated waste and disposed as per workplace procedures iii. Returned tools and unused materials **(Award 1 mark each)**	**3**		
Sub-total	**3**		
Total (Observation Checklist)	**22**		

PRODUCT CHECKLIST				
5. Prepared work pieces according to task specifications: Linear tolerance: ± 1 All dimensions are in millimeters (mm)				
a) Dimensions:		**4**		
i. 90	(8 × ½)	**1**		
ii. 60	(2 × ½)	**1**		
iii. 50	(2 × ½)	**1**		
iv. 100	(2 × ½)	½		
v. 70	(1 × ½)	½		
vi. 45	(1 × ½)			
(Award ½ mark each)				
Sub-total		**8**		
b) Squareness of work pieces				
i. 90 x 45	(2 × ½)			
ii. 90 x 100	(2 × ½)	**4**		
iii. 90 x 50	(2 × ½)			
iv. 90 x 60	(2 × ½)			
(Award ½ mark each)				
Sub-total		**4**		
Carried out gas welding 6. Butt joint: a) Welded as per the welding symbol b) Weld quality i) No undercut ii) No cavities iii) No cracks iv) Proper fusion		**6**		

v) No distortion **(Award 1 mark each)**			
Sub-Total	**6**		
7. Tee joint (Pipe to plate) a) Welded as per welding symbol b) Alignment 90° ± 1^0 c) Weld quality i) No undercut ii) No cavities iii) No cracks iv) Proper fusion v) No distortion **(Award 1 mark each)**	**7**		
Sub-total	**7**		
8. Corner-joint a) Welded as per welding symbol b) Alignment 90° ± 1^0 c) Weld quality i. No cavities ii. Uniform bead iii. Proper fusion iv. No distortion v. No slag inclusion ***(Award 1 mark each)***	**7**		
Sub-Total	**7**		
9. Tee -joint (plate to plate) a) Welded as per welding symbol b) Alignment 90° ± 1^0 c) Weld quality i. Uniform bead	**7**		

ii. No undercut iii. No cavities iv. Proper fusion v. No distortion ***(Award 1 mark each)***			
Sub-Total	**7**		
10. Assembly: a) Produced component as per working drawing (Pipe centrally placed on plate) ***(Award 2 marks)***	**2**		
Sub-Total	**2**		
Total (Product Checklist)	**41**		
GRAND TOTAL	**63**		
Candidate percentage Score = $\frac{X}{63} \times 100$	**100%**		

ASSESSMENT OUTCOME

The candidate was found to be:

Competent ☐ Not yet Competent ☐

(Please tick as appropriate)

(The candidate is competent if the candidate obtains at least 50%)

Feedback from the Candidate:

Feedback to the Candidate:

Candidate Signature **Date:**

_____ _____

Assessor's Signature **Date**

_____ _____